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ABSTRACT

The purpose of this study was to determine migration and occupational patterns of Ohio vocational agriculture graduates and to identify any relationships between individual characteristics and migration during the first 5 years following their graduation in 1963. Nearly 200 responses by graduates of 45 randomly selected vocational agriculture departments indicated that most graduates entered nonagricultural occupations, and four out of five remained within 25 miles of their home communities even after 5 years. Recommendations cover: (1) guidance and occupational information, (2) placement and followup for at least 2 years, (3) guidance for potential agricultural technicians and professionals, (4) curriculums adapted to local needs, (5) expansion of the young farmer association, and (6) teacher recognition of differences in migration patterns between urban and rural districts. (BH)

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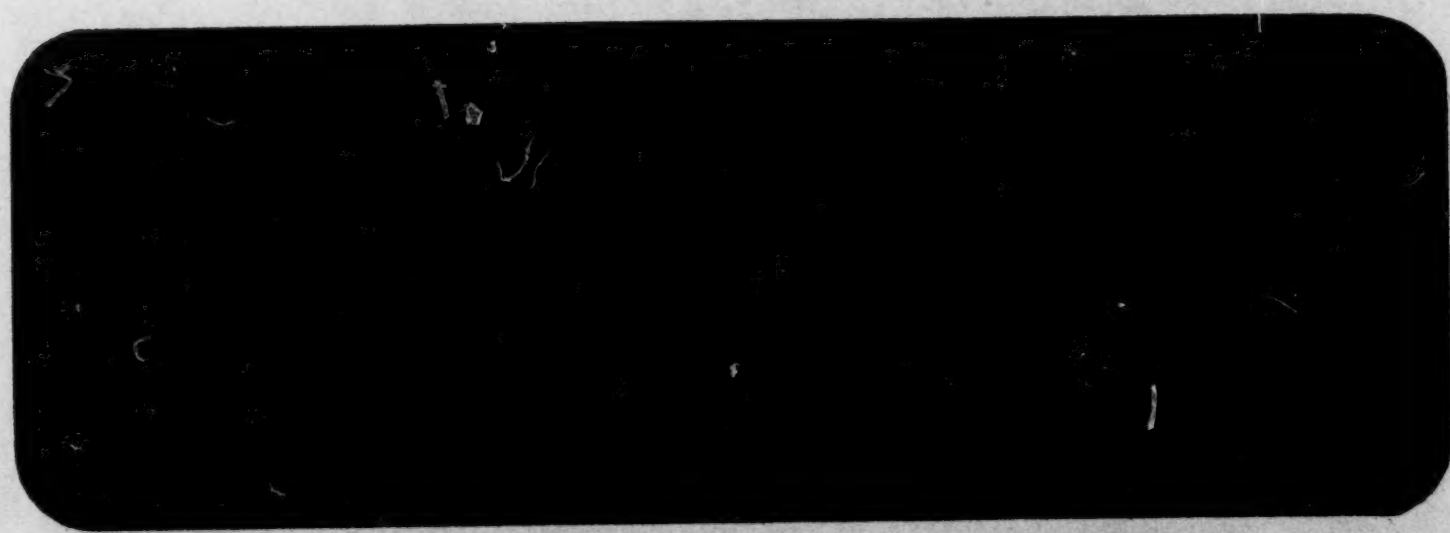

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RESEARCH SERIES IN AGRICULTURAL EDUCATION

A Research Report

of a

Graduate Study

MIGRATION PATTERNS OF VOCATIONAL AGRICULTURE GRADUATES IN OHIO

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MIGRATION PATTERNS OF VOCATIONAL AGRICULTURE GRADUATES IN OHIO

INTRODUCTION

The American scene is characterized by a high degree of residential and geographic mobility among its population. Research has revealed that one in five Americans changes his place of residence each year, one in fourteen moves from one county to another and one in thirty migrates from one state to another. These data imply that the "average" American will live in fourteen houses, five counties and three states in the course of his life time.[1]

Population mobility of this magnitude is largely the result of technology. Changes in the numbers and types of workers needed by employers take place continually throughout the country creating frequent local imbalances between labor demand and labor supply. These imbalances are always in the process of correction as workers move to jobs and jobs to workers.

Rural people have been especially affected by these changes. Due to the impact of mechanical, chemical, and biological innovations as well as an effective program of vocational education in agriculture, the number of farm workers required to produce the nation's food and fiber has been substantially reduced. At the same time the number of off-farm workers required to support agricultural production in such areas as processing, distribution, marketing, farm supply and other agricultural services has increased tremendously.

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[1]Everett S. Lee and G. Putman Barber, "Differentials in Spatial Mobility", National Vocational-Technical Education Seminar on Occupational Mobility and Migration, (Raleigh: Center for Occupational Education, North Carolina State University, Center Seminar Report No. 3, 1966).

As the agricultural economy continues to change, the demand for employees in off-farm agricultural occupations will increase according to most economists. Many of these jobs will be off the farm and may not be located in the typical rural or small urban community.

In view of these changes, it is necessary that vocational educators in agriculture look beyond the scope of the local community in planning programs to meet the needs of the students. The concern becomes that of preparing young people for gainful employment no matter where they choose to live and finding out what happens to youth after they leave high school becomes a matter of crucial importance.

NEED

Recognizing the impact of increased geographic mobility of the nation's population the need for this study of the migration patterns of vocational agriculture graduates in Ohio was established on the following points:

1. There was an apparent lack of pertinent, up-to-date information on vocational agriculture graduates, especially as it related to the location of their employment after graduation.
2. Social and economic conditions had changed over the past decade and were continuing to change at a rapid pace.
3. The clientele served by vocational education in agriculture had undergone considerable changes.
4. Finally, it was believed that information of the nature sought through the study would be useful in planning and improving programs of vocational agriculture.

PURPOSE

The major purpose of this study was to determine the migration patterns of vocational agriculture graduates in Ohio during the first five years following their high school graduation in 1963.

OBJECTIVES

In order to accomplish the major purpose the specific objectives of this study were:

1. To identify the occupations in which high school graduates of vocational agriculture had been engaged since graduation.
2. To determine the proportion of high school vocational agriculture graduates who had migrated from their home communities.
3. To determine when the vocational agriculture graduates had migrated from their home communities as well as the number of moves they had made and the distance they had moved.
4. To determine if there was a significant relationship between migration and selected characteristics of these vocational agriculture graduates including:

    a) Parent's socio-economic status
        1. occupation
        2. income
        3. education
        4. size of family

    b) Occupations of the graduates
    c) Education beyond high school
    d) Marital and family status
    e) Military service

SCOPE OF THE STUDY

Former vocational agriculture students who had graduated from high school in 1963 were identified from 45 randomly selected vocational agriculture departments in Ohio. Of the graduates identified, 67 were in the military service and were excluded from the study. Two graduates were deceased. Sufficient addresses could not be identified for 14 additional graduates. The data presented in this report were based on responses from 194 graduates or 70.3 per cent of 276 graduates to whom questionnaires were mailed.

CONCLUSIONS

The following conclusions were based on an interpretation of the data presented in this study:

Occupational Patterns

1. The first positions assumed by a majority of the graduates after leaving high school were in nonagricultural occupations.

   The overall proportion of graduates in agricultural and nonagricultural occupations changed very little during the five years following graduation as indicated by the fact that six of every ten graduates studied were in nonagricultural occupations at the time of the study. However, a notable trend was the fivefold increase in the number of graduates who entered part-time farming during this five-year period.

2. The fact that fewer graduates than expected were engaged in agricultural occupations might be partially attributed to the uncertainty faced by the 60 per cent who had not fulfilled their military service obligation.

3. In terms of job stability and persistency, graduates employed in agriculture had held significantly fewer full-time jobs and had greater longevity per job than those in nonagricultural positions.
4. Unemployment among the graduates was relatively low as evidenced by the fact that less than one of every five graduates had experienced any unemployment during the five year period since leaving high school. The total amount of time unemployed was equivalent to less than one percent of the potential employable time for all graduates.

Migration Patterns

1. Four out of every five graduates were living within 25 miles of their home community five years after graduating from high school and less than one in every ten graduates had moved more than 100 miles away from their home communities.
2. The major reasons why migrants left their parental homes were for marriage, to attend college, or to obtain a job. When all factors were considered for all residential moves completed per migrant, the major motivating force was 'because of a job'.
3. Most of the migration occurred during the first two years after graduation with more graduates migrating during the first year than any other time.
4. Since most of the migrants moved during the early part of their first five years out of high school only limited migration can be expected of them in the future. Very few graduates had plans for future migration.

Relationship Between Selected Characteristics and Migration

1. There were significant relationships between migration and residence of origin, father's occupation, marital status, military experience, and current occupations.
2. There were no differences between migrants and nonmigrants with respect to level of education of parents, size of parental family, level of parental income, or rank in graduating class. In addition, there were no significant differences between nonmigrants and migrants in terms of level of formal education, type of formal education beyond high school and the number of jobs held since graduation.

RECOMMENDATIONS

On the basis of the conclusions, ideas, and suggestions resulting from this study, the investigator believes the following recommendations merit consideration:

1. It is recommended that greater attention be directed toward vocational guidance for students who enroll in high school vocational agriculture. Students who show the need, interest, and ability for success in agriculture should be provided with comprehensive occupational information and guidance concerning the opportunities for gainful employment in this field.
2. It is recommended that attention be focused on placement and follow-up of graduates, particularly during the first two years after high school graduation. Vocational agriculture teachers are in excellent positions to know the agricultural opportunities in their communities and surrounding areas. Thus, they are in a strategic position to render a vital service to their students by helping them obtain employment in agriculture following graduation.

3. It is recommended that greater emphasis be placed on guiding capable students toward careers as agricultural technicians and professional agriculturists by encouraging these students to pursue agricultural curricula at the technical school and college levels.
4. It is recommended that curricula for local vocational agriculture programs be based largely upon community and county situations. This recommendation is based on the fact that a major proportion of the graduates, in this study, lived within 25 miles of their home communities five years following high school graduation.
5. It is recommended that attention be directed toward improving and expanding the young farmer association to meet the needs of graduates who are entering part-time farming after being out of high school two, three, or more years.
6. It is recommended that teachers recognize that higher rates of migration occur among students with nonagricultural backgrounds. In urban vocational agriculture departments where the major proportion of the students have non-agricultural backgrounds, this implies emphasis on preparation in off-farm agricultural occupations such as agricultural service and supply, agricultural mechanics, and horticultural occupations. In rural vocational agriculture departments where students with nonagricultural backgrounds are fewer in number, emphasis should be on production agriculture with the needs of students with nonagricultural backgrounds being met through individualized instruction and independent study.

METHODOLOGY

A random sample was drawn which included 45 Ohio Departments of Vocational Agriculture. Teachers in these departments identified 345 persons who had graduated in 1963. One hundred and ninety, or 70.3% of these graduates responded to a mail questionnaire. This questionnaire provided information on personal and educational background as well as migration and employment. The chi-square test was used to test relationships between migration and selected characteristics of the graduates.

Study Population

A major consideration in selecting the population for this study was the length of time the graduates had been out of school. Vocational agriculture students from the graduating class of 1963 were selected for the following reasons:

1. It was believed that the 1963 vocational agriculture graduates were between 22 and 25 years old. Therefore, a relatively high degree of migration could be expected since the graduates were within that age group of the population with the highest rate of mobility according to most demographers.
2. It was believed that five years out of high school was sufficient time.

Sampling Procedure

In order to identify the sample for the study a list of 243 of the 305 vocational agriculture departments in Ohio was compiled according to the following criteria:

1. The vocational agriculture teachers had been teaching one or more years at the time of the study. In multiple teacher departments at least one of the teachers had been teaching one or more years.

2. The vocational agriculture department had been established prior to 1963 and had not been involved in a consolidation of more than two school districts since 1963.

It was believed that beginning teachers and teachers in departments which had been involved in extensive school district consolidations since 1963 would have difficulty in locating names and addresses of 1963 graduates.

A random sample of 45 vocational agriculture departments was drawn from the list and the teachers in these departments were requested to provide names and addresses for their 1963 graduates. The 45 departments were located in 32, or 37 percent, of the 88 counties in Ohio and were distributed geographically in western, northwestern, northeastern, and southeastern regions of the state.

Teachers in the 45 departments provided the names and addresses of 345 graduates of 1963. Of this group, 69 were deemed unavailable for study due to military service or other reasons.

Of the 276 persons to whom questionnaires were mailed usable data were collected from 194 for a response of 70.3 percent.

Validation of Response

Mail surveys of the type used in this study usually do not yield a 100 percent return. Where the return is substantially less than 100 percent, there is always the question of how "different" are the respondents from the nonrespondents, and what would the findings have been had the nonrespondents answered. To find out if the nonrespondents in the sample group had any effect on the sample a validation procedure was established whereby a random sample of the nonrespondents was surveyed via telephone.

Thirteen of the 20 nonrespondents drawn in the sample were contacted and queried concerning seven selected characteristics. These data were compared with similar data obtained from the respondent group and Chi-square was used to determine the significance of difference between the two groups.

On the basis of these comparisons it was concluded that the differences between the two groups were not sufficient to warrant an adjustment of data for the respondents.

MAJOR FINDINGS

Some of the major findings of the study are shown in the tables which follow. The first of these tables shows some of the general characteristics of these 194 young men. Most of the percentages show the characteristics of a majority of the respondents but in some cases certain characteristics of small minorities of the population are presented for contrast and emphasis.

TABLE 1

SELECTED CHARACTERISTICS OF 194 OHIO VOCATIONAL AGRICULTURE GRADUATES IN 1963

Characteristic	Per cent of Graduates
Completed four years of vocational agriculture	90
Ranked in the middle one-third of their graduating class	64
Came from farm homes	85
Came from urban homes	8
Had three or more brothers and sisters	58
Sons of full-time farmers	51
Sons of fathers who were part-time farmers	26
Level of income of their parents - $5,000 to $8,999	51
Level of income of their parents was less than $3,000	5

TABLE 2

A SUMMARY OF SELECTED CHARACTERISTICS OF 194 OHIO VOCATIONAL AGRICULTURE GRADUATES FIVE YEARS AFTER THEIR GRADUATION

Characteristic	Percent of Graduates
Aged 26 years or less	85
Graduates married	60
One or more children	70
Served in military service	40
Obtained some type of formal education beyond high school	48
Attended college (and two-thirds of these graduates had pursued agricultural curricula)	14
First occupation after graduation:	
Entered a nonagricultural field	57
Entered the field of agriculture	33
Remainder entered college or military service	10
Were engaged in agricultural occupations five years after high school graduation	43
Were undecided about their occupational plans for the next five years	37
Had experienced short periods of unemployment during the first year period since graduation	18
The rate of unemployment for the five year period was less than	1
Wives were employed outside the home(wives of married graduates)	32
Indicated they would repeat vocational agriculture if it were possible.	83

Migration Patterns of Vocational Agriculture Graduates

Two key terms were used to describe the geographic mobility of the graduates. Graduates who were living within their home communities at the time of the study were designated as nonmigrants. The graduates who were not living in their home communities were classified as migrants.

These two major categories were further divided into two subcategories each. The subcategories for the nonmigrant group were nonmovers and local movers. Nonmovers were living in their residence of origin, which was the parental home or the home in which they lived as seniors in high school. Local movers had moved from their residence of origin, but resided within their home community.

Subcategories for the migrant group were county movers and out-of-county movers. County movers had moved from their home community but were residing within their home county. Out-of-county movers had moved from their home county and resided elsewhere. They may have lived in a contiguous county, in a noncontiguous county within Ohio or in a state other than Ohio.

TABLE 3

CLASSIFICATION OF GRADUATES ACCORDING TO TYPE OF GEOGRAPHIC MOBILITY

Mobility Categories	N	Per Cent
Nonmigrants		
Nonmovers	60	30.9
Local Movers	74	38.1
Migrants		
County movers	22	11.4
Inter-county movers	38	19.6
TOTALS	194	100.0

Nonmigrants -- The data in Table 4 show that nonmigrants had completed a number of changes in residence during the five year period following graduation. Excluding military service, 16 per cent of the nonmigrants had lived away from their home communities while pursuing a job or attending college. However, these graduates had apparently returned to their home communities to establish their residence at the time of the study.

Approximately 37 per cent of the nonmigrants had not changed their residence following graduation. Thirty-six per cent had moved once; 20 per cent had moved two times; and seven per cent of these nonmigrants had made more than two residential moves. Of the 134 graduates who were nonmigrants, 55 per cent were local movers which means that they had moved from their parent's home but had remained in their home communities.

TABLE 4
NUMBER OF RESIDENTIAL MOVES COMPLETED BY NONMIGRANTS SINCE HIGH SCHOOL GRADUATION

Number of Moves	Nonmigrants		Total	
	Nonmovers	Local Movers	N	Per Cent
None	49	0	49	36.6
1	8	40	48	35.8
2	2	25	27	20.2
3	1	4	5	3.7
4 or more	0	5	5	3.7
TOTALS	60	74	134	100.0

Migrants -- The 60 graduates who had migrated from their home communities following high school graduation completed a total of 105 changes in residence during the five year period or a mean of 1.75 moves per graduate. Twenty-five per cent of the migrants had moved one time. Fifty-seven per cent of the migrants had moved two times and 18 per cent had moved three or more times. The data in Table 5 show the number of residential moves completed by the migrants.

TABLE 5

NUMBER OF RESIDENTIAL MOVES COMPLETED BY MIGRANTS AFTER HIGH SCHOOL GRADUATION

Number of Moves	Migrants		Total	
	County Movers	Out-of-County Movers	N	Per Cent
None[a]	0	0	0	0
1	5	10	15	25.0
2	10	24	34	56.7
3[b]	4	4	8	13.3
4 or more[b]	3	0	3	5.0
TOTALS	22	38	60	100.0

$X^2 = 4.220$ df = 2 Not Significant at .05
X^2 (.05) = 5.991

[a]This row was excluded when calculating chi-square.

[b]These rows were combined for calculating chi-square.

By observation, it appeared that the number of residential moves completed by graduates who had moved out of their home county was greater than the number of moves completed by county movers. However, when chi-square was used as a test of significance the X^2 value revealed that the difference was not significant at the .05 level.

Reasons for Moving

Migrants advanced several reasons for moving as shown by the data in Table 6. College, military service, and employment were the major reasons for the first move. The most frequent reason for making the second and successive moves was "because of a job". For all moves combined, the most frequent reason for moving was "because of a job" which suggests that a major portion of migration was the result of the quest for comparative economic opportunity.

TABLE 6
MAJOR REASONS FOR EACH MOVE COMPLETED BY VOCATIONAL AGRICULTURE GRADUATES WHO HAD MIGRATED

Reasons for Moving	1st move	2nd move	3rd move	4th move	Total N	Total Per Cent
Marriage	13	2	0	0	15	14.3
Because of job	14	19	7	1	41	39.1
Military service	9	4	0	0	13	12.4
College	16	3	1	0	20	19.0
Moved with family	5	1	0	0	6	5.7
Other	3	5	1	1	10	9.5
TOTALS	60	34	9	2	105	100.0

Distance Migrated

Thirty-one per cent of the 194 respondents had migrated from their home communities five years after graduating from high school. Of the 60 migrants, 63 per cent lived within 25 miles of their home communities. When the distances moved by county movers and out-of-county movers were compared, it was noted that all of the county movers and nearly one-half of the out-of-county movers lived within 25 miles of their residence of origin. The data showing the distances migrants had moved from their home communities are presented in Table 7.

TABLE 7

DISTANCE MIGRANTS HAD MOVED FROM THEIR HOME COMMUNITIES

Distance From Home Community	Migrant Classification		Total	
	County Movers	Out-of-County Movers	N	Per Cent
Less than 25 miles	22	16	38	63.3
26 to 100 miles	0	8	8	13.3
101 to 200 miles	0	10	10	16.7
201 to 400 miles	0	1	1	1.7
Over 400 miles	0	3	3	5.0
TOTALS	22	38	60	100.0

Relationships Between Migration and
Selected Characteristics of the Graduates

It was hypothesized that significant relationships may exist between migration and selected characteristics of the graduates. Two of nine background characteristics were found to have a significant relationship to migration when analyzed using chi-square as the test of significance. Data for these characteristics are summarized in Table 8.

TABLE 8

SUMMARY OF RELATIONSHIPS BETWEEN SELECTED BACKGROUND CHARACTERISTICS AND MIGRANT CLASSIFICATION OF VOCATIONAL AGRICULTURE GRADUATES

Background Characteristics Studied	X^2	d.f.	P.
Residence of origin	8.476	2	.05
Educational level of father	0.360	3	n.s.
Educational level of mother	5.585	3	n.s.
Number of siblings	2.015	2	n.s.
Number of older brothers	0.485	2	n.s.
Migration of siblings	2.286	2	n.s.
Occupation of father	17.602	3	.05
Estimated level of parental income	5.647	4	n.s.
Rank in graduating class	3.721	2	n.s.

A significant relationship was revealed for four of seven experiential factors. A summary of experiential factors studied with their X^2 values and associated probabilities for each are presented in Table 9.

TABLE 9

SUMMARY OF RELATIONSHIPS BETWEEN SELECTED EXPERIENTIAL FACTORS AND MIGRANT CLASSIFICATION OF VOCATIONAL AGRICULTURE GRADUATES

Experiential Factors Studied	X^2	d.f.	P.
Marital Status	14.169	1	.05
Military experience	6.441	1	.05
Level of formal education	4.769	1	n.s.
Type of education beyond high school	1.672	1	n.s.
First occupation	10.079	2	.05
Current occupation	17.272	1	.05
Number of jobs since graduation	9.132	4	n.s.

Recommendations for Further Study

This study was limited to an investigation of migration patterns of a single graduating class of vocational agriculture students in Ohio. However, the study has been suggestive of additional areas of needed research concerning the activities of vocational agriculture students after they leave high school.

The areas include:

1. Research to determine if there are streams of migration unique to vocational agriculture graduates from specific geographic regions in Ohio.
2. Research to determine the migration patterns of dropouts of vocational agriculture programs.
3. Research, using a longitudinal design, to discover relationships and discrepancies between aspirations and actual accomplishments as they relate to migration patterns of vocational agriculture graduates.
4. Research to determine similarities and differences in migration patterns of vocational agriculture graduates and graduates who have not taken vocational agriculture in high school.
5. Research to determine the relationship of geographic mobility to occupational mobility of vocational agriculture graduates.
6. Research to determine how available data (i.e. census data) can be more effectively utilized in predicting migration and planning vocational education programs in agriculture.

BIBLIOGRAPHY

Public Documents

U.S. Department of Agriculture, Fact Book of U.S. Agriculture. Washington, D. C.: U.S. Government Printing Office, Miscellaneous Publication No. 1063, 1967.

U.S. Department of Health, Education and Welfare, Office of Education, Education for a Changing World of Work. Washington, D. C.: U.S. Government Printing Office, 1963.

Books

Blau, Peter M. and Duncan, Otis Dudley. The American Occupational Structure. New York: John Wiley & Sons, Inc., 1967.

Bogue, Donald J., The Population of the United States. Illinois: The Free Press of Glencoe, 1959.

Bogue, Donald J., Shryock, Henry S., and Hoermann, Siegfried A. Subregional Migration in the United States, 1936-40, Vol. I, Streams of Migration Between Subregions. Oxford, Ohio: Scripps Foundation Studies in Population Distribution, No. 5, 1957.

Davis, Kingsley. Human Society. New York: The MacMillan Company, 1949.

Downie, N.M. and Heath, R.W. Basic Statistical Methods, 2nd Edition, New York: Harper and Row, 1965.

Hamilton, C. Horace. "Educational Selectivity of Migration from Farm to Urban and to Other Nonfarm Communities," Mobility and Mental Health, Springfield: Charles C. Thomas, Publisher, 1963.

Hawley, Amos H. Human Ecology. New York: The Ronald Press Company, 1950.

Landis, Paul H. and Hatt, Paul K. Population Problems. New York: American Book Company, 1954.

Mack, Raymond W. "Our Dynamic Society: An Analysis of Social Trends in the United States," Family Mobility in our Dynamic Society. Ames: Iowa State University Press, 1965.

Nelson, Lowry. Rural Sociology. New York: American Book Company, 1952.

Pedersen, Harold A. "Family Mobility - Rural and Urban," Family Mobility in Our Dynamic Society. Ames: Iowa State University Press, 1965

Shryock, Henry S. Population Mobility Within the United States. Chicago: Community and Family Center, University of Chicago, 1964.

Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.

Sjaasted, Larry. "Occupational Structure and Migration Patterns," Labor Mobility and Population in Agriculture. Ames: Iowa State University Press, 1961.

Slocum, Walter L. Agricultural Sociology. New York: Harper and Brothers, Publishers, 1962.

Thompson, Warren. Population Problems, Fourth Edition. New York: McGraw-Hill Book Company, 1953.

Venn, Grant. Man, Education, and Work. Washington, D. C.: American Council on Education, 1964.

Articles and Periodicals

Bowles, Gladys K. "Migration Patterns of the Rural-Farm Population, Thirteen Economic Regions of the United States, 1940-1950." Rural Sociology, (1957), pp. 1-11.

Bradley, Howard R. "Where Do They Go - After Graduation?" The Agricultural Education Magazine, (April, 1961), pp. 230-231.

Deyoe, George P. "Some Comparisons of High School Graduates Who Took Vocational Agriculture and Other Male Graduates," The Agricultural Education Magazine, (December, 1961), pp. 126-127.

Hamilton, C. Horace. "The Annual Rate of Departure of Rural Youths From Their Parental Home," Rural Sociology, (June, 1936), pp. 169-170.

Hamlin, Herbert M., "What is Research," American Vocational Journal, (September, 1966), p. 15.

Hemp, Paul E. "What 246 Former Students Think About Vocational Agriculture Training," The Agricultural Education Magazine, (November, 1961), pp. 114-115.

Landis, Paul H. "Educational Selectivity of Rural-Urban Migration and Its Bearing on Wages and Occupational Adjustment," Rural Sociology, (September, 1946), pp. 218-232.

Newton, Melvin F. "Factors Influencing Occupational Choices of Farm-Reared Male Graduates of Newton (Iowa) High School," The Agricultural Education Magazine, (April, 1963), pp. 235-236.

Plunkett, Margaret L. Geographic Mobility of Young Workers," Occupational Outlook Quarterly, (September, 1960), pp. 3-6.

Thomas, Dorothy S. "Selective Migration," Milbank Memorial Fund Quarterly, 16: 403-407, 1938.

Wood, Eugene S. "What Happens to Illinois Vocational Agriculture Students After High School?" The Agricultural Education Magazine, (December, 1960), pp. 137-138.

Reports

Beers, Howard W. Mobility of Rural Population. Lexington: Kentucky Agricultural Experiment Station, Bulletin 505, June, 1947.

Bender, Ralph E. Occupations of Ohio's Vocational Agriculture Graduates. Non-thesis Study, Department of Agricultural Education, The Ohio State University, 1967. (mimeograph)

Brown, Harold and Buck, Roy C. Factors Associated with Migrant Status of Young Adult Males from Rural Pennsylvania, University Park: Pennsylvania Agricultural Experiment Station, Bulletin 676, January, 1961.

Eninger, Max A. The Process and Product of T & I High School Level Vocational Education in the United States: The Product, Pittsburgh: American Institutes for Research, 1965.

Harp, John, Morton, Mildred and Ruff, George E. Expectations and Realities: A Study of Migration Behavior of Youth. Ithaca: Cornell University Agricultural Experiment Station, Bulletin No. 69, 1967.

Lee, Everett S. and Barber, G. Putnam. "Differentials in Spatial Mobility," National Vocational-Technical Education Seminar on Occupational Mobility and Migration. Raleigh: Center for Occupational Education, North Carolina State University, Center Seminar Report No. 2, 1966.

Magisos, Joel H. Occupations of Former Vocational Agriculture Students in the State of Washington. Pullman: Department of Education, Washington State University, 1966.

Rosen, Howard. "Manpower Supply in the United States," National Vocational-Technical Education Seminar on Occupational Mobility and Migration. Raleigh: Center for Occupational Education, North Carolina State University, Center Seminar Report No. 2, 1966.

Saunders, H. W. A Follow-Up Study of Students of Vocational Agriculture in Virginia, 1918-1955, Virginia Polytechnic Institute, January, 1959.

Schwarzweller, Henry K. Sociocultural Origins and Migration Patterns of Young Men from Eastern Kentucky. Lexington: University of Kentucky, Agricultural Experiment Station, Bulletin 685, 1963.

Taves, Marvin J. and Coller, Richard W. In Search of Opportunity, Minneapolis: University of Minneapolis: University of Minnesota Experiment Station, Technical Bulletin 247, 1964.

Thompson, Warren S. Migration Within Ohio, 1935-40. Oxford, Ohio: Scripps Foundation for Research in Population Problems, Miami University, 1951.

Warmbrod, J. Robert and Phipps, Lloyd J. Review and Synthesis of Research in Agricultural Education. Columbus, Ohio: The Center for Research and Leadership Development in Vocational and Technical Education, The Ohio State University, 1966.

Unpublished Material

Beals, Harold D. "Educational and Occupational Plans and Attainments of Wisconsin's Rural Youth." Unpublished Ph.D. Dissertation, University of Wisconsin, 1965.

Bridges, Raymond A. "Occupational Patterns of Vocational Agriculture Graduates in Southeastern Ohio." Unpublished Ph.D. dissertation, The Ohio State University, 1956.

Departments of Vocational Agriculture by Counties and Districts, Columbus, Ohio: State Department of Education, Division of Vocational Education, Agricultural Education, 1967-68. (mimeograph)

Jones, Clair. "A Follow-Up Study of Graduates In Vocational Agriculture in Mercer County." Unpublished Master's thesis, The Ohio State University, 1962.

Lindenmuth, Ward A. "The Occupational Patterns and Plans of 160 Former Students of Vocational Agriculture in Ohio." Unpublished master's thesis, The Ohio State University, 1956.

Matteson, Gerald R. "Vocational Education Completed by East Central Wisconsin Male Graduates and Selected Employment Factors." Unpublished Ph. D. dissertation, University of Wisconsin, 1966.

McBride, Robert J. "Occupational Status of Youth One Year After High School Graduation, Allen County, Ohio 1962." Unpublished Master's thesis, The Ohio State University, 1964.

McRill, Arlen D. "The Mental Ability and Scholastic Achievement of Freshmen Vocational Agriculture Students in Shelby County." Unpublished Master's thesis, The Ohio State University, 1961.

Robinson, Ted R. "Factors Related to the Occupations of Iowa Farm Male High School Graduates." Unpublished Ph. D. dissertation, Iowa State University of Science and Technology, 1964.

Safilios, Constantina Constantine. "Migration Patterns in Ohio, 1949-50." Unpublished thesis, The Ohio State University, 1959.

Snider, Bernard A. "A Follow-Up Study of Graduates in Vocational Agriculture in Williams County." Unpublished Master's thesis, The Ohio State University, 1963.

Warner Hildred Harvey. "The Intellectual Abilities of Freshman Students Enrolled in Vocational Agriculture in Wood County." Unpublished Master's thesis, The Ohio State University, 1961.